

A Case of Agranulocytosis

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THE clinical features of agranulocytosis, and the frequent development of the condition following the administration of pyramidon, are now widely recognized. The following case is sufficiently typical to be worth recording :—

Mrs. E. W., aged 53. Seen with Dr. J. Unsworth on 2nd April, 1936. There was a history of about one week's illness with a "septic throat," pyrexia, vomiting, and occasional rigors. The patient looked ill, with slight cyanosis, and some respiratory distress. Temperature 101° F., and pulse 130.

There was extensive ulceration of the fauces, with a greyish slough on both tonsils. The cervical glands were not markedly enlarged, and the liver and spleen were not palpable.

There was nothing else noteworthy on physical examination except profound prostration. A swab from the tonsils had been reported negative for bac. diphtheriæ.

The general features of the case suggested the possibility of agranulocytosis, and on inquiry it was found that the patient had been taking a preparation which probably contained pyramidon. It was not possible to find out how much of this had been taken.

Investigations.—Leucocytes, 2,800 per cmm. No polymorphonuclear cells seen in two films, leucocytes were entirely lymphocytes, mainly of the large type.

Blood-culture : sterile. Throat-swab : many spirochaetes and fusiform bacilli present, with hæmolytic streptococci. No diphtheria bacilli detected. (The presence of large numbers of Vincent's organisms in the throat is not uncommon in agranulocytosis.)

Nucleotide therapy was advised, and during the next four days the patient received 80 c.c. pentose nucleotide by intramuscular injection, in divided doses. There was no evidence of clinical improvement.

On 6th April she was admitted to the Royal Victoria Hospital. The temperature was then 102° F., pulse 136, respirations 56. Blood-count : Hb = sixty-two per cent. ; red cells = 3,280,000 per cmm. ; white cells = 800 per cmm. Film showed no polymorphonuclear leucocytes, platelets normal. She received a further 25 c.c. nucleotide solution.

On 7th April her condition was worse, and she had developed definite signs of broncho-pneumonia. The blood-film showed only an occasional lymphocyte. She died on the same afternoon.

In this case there was no evidence of bone-marrow response after five days of moderately intensive nucleotide therapy.

Liver extract was not used, although it is considered by Witts and others to be of service in agranulocytosis.

POST-MORTEM NOTE.

A post-mortem examination was carried out some eighteen hours after death. The only gross pathological changes were a firm greyish consolidation of the upper lobe of the right lung, a red consolidation of the lower lobe of the left lung, ulceration of the Peyer's patches and of the solitary follicles of the ileum, and fatty changes in the liver. The marrow of the upper third of the right femur was fatty and showed no leucoblastic reaction.

Microscopically, the marrow of the upper third of the right femur exhibits a predominance of myeloblasts with a smaller proportion of myelocytes. No mature granulocytes can be seen. Megakaryocytes are not reduced in number. The liver is the seat of fatty changes, and is free from cellular infiltration of any kind. On the other hand, the kidney exhibits numerous foci of cellular infiltration in the boundary zone, and many of the cells conform in their general histological characters to myeloblasts. The ulceration of the small intestine is attended by a mononuclear infiltration of the submucous and muscular coats, and bears a notable resemblance to typhoid ulceration. The consolidation of the lungs is peculiar in the respect that the air-sacs are turgid with a homogenous exudate. This exudate has been shown to contain a large proportion of fibrin by Gram's stain, but polymorphonuclear leucocytes are entirely absent.

ULSTER MEDICAL SOCIETY.

THE annual golf competition was held at the Royal County Down Golf Club, Newcastle, by kind permission of the captain and council. The president (Dr. Foster Coates) entertained the Fellows and Members to lunch and tea. The competition, which was eighteen holes against bogey, resulted in a tie between Dr. F. Barnes Elwood and Dr. H. Hilton Stewart, each being "all square." The replay resulted in a win for Dr. Stewart at the seventeenth hole.

Fellows and Members will be pleased to learn that, owing to the generosity of the president, a handsome panel containing the names of all the presidents of the Society has been erected in the hall of the Whitla Medical Institute.

BRITISH MEDICAL ASSOCIATION, ANNUAL MEETING, 1937

By the time this report is in print the Arrangements Committee in London will have settled a provisional programme for the Belfast Meeting in July. May we take this opportunity of reminding local members that only when we have some idea of the funds at our disposal will it be possible to make any detailed plans for the entertainment of our guests. If this is to be on the same scale as at previous meetings, we should aim at raising locally about £2,000. Only about £1,000 has been subscribed up to date, so if you have not yet sent in your subscription, please let us have it as